Horticultural Society

MASSACHUSETTS PLOUGHMAN

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Editorial.

SOME SANITARY SUGGESTIONS.

The heated term is upon us, and comes this year with a torrid zone power. Farmers and others who work hard and are exposed to the direct rays of the sun should take warning from the accounts that come to us from the West, of the great mortality by what is called "sun-stroke." Physicians disagree somewhat as to the nature of the disease called sun-stroke, or thermic fever. It was formerly supposed to be a congestion of blood on the brain, caused by direct action of the sun's heat. The modern theory is that as sun-stroke seldom, if ever, attacks persons in vigorous health and of temperate habits. The paralysis is to be attributed to a disease of the blood, caused by an excessive indulgence in carbonacious (heat producing) food, and specially by the intemperate use of intoxicating drinks, and that the sun's heat only precipitates this otherwise slow disease.

However this may be, all are agreed in thinking, that sun-stroke is not a disease which strikes a person down suddenly and without warning. There is a preparatory process and due admonition is given of the attack, which at last does develop itself suddenly. The final cause is the sun's heat, but the more remote causes are over-exertion of mind or body, excessive indulgence of the appetites, excitement of any kind that is followed by corresponding depression, want of sleep, in short anything which tends to produce lassitude. The premonitory symptoms are restlessness, a sense of fatigue, want of appetite, great thirst, hot skin, a cessation of perspiration, and, finally, dizziness and fainting. The stage of unconsciousness is accompanied by heavy breathing, dry skin, rapid and feeble pulse, a loss of sensation and voluntary motion, dilated pupil, and generally a flushed face, though sometimes the face is deadly pale. These symptoms are not unlike those of intoxication, and show that there is some analogy between the two conditions of the body. Knowing these remote causes and the warning precursors of sun-stroke, the prudent man will foresee the evil and avoid its attack, "hide himself" as the good Book expresses it.

It is worthy of remark in this connection that farmers are seldom attacked by sun-stroke. It would seem at first thought that they were more exposed than any other class of laborers, as they work in the field and have no shelter against the direct rays of the sun. Men can't take hay and at the same time hold an umbrella over their heads. But where there is one man stricken in the field by sunstroke a score are attacked in our cities. The open field is by no means so hot a place as the streets of a city where the heat is radiating from brick walls and stone pavements, and where there is little or no circulating. In the field, and specially the hay field, the green grass keeps the air cool and well vitalized, and the laborer there sniffs the breeze, if there is any. The main reason, however, for the exemption of farmers from sunstroke is their temperate habits, aided by vigorous constitutions.

If the above statements are correct it follows that no one need fear a sunstroke if he will take due precautions. It is not often that we are oppressed with such a torrid zone heat as we have been this summer, and when the torrid temperature is upon us we must do as they do in the equatorial regions, lie by during the hottest part of the day. When the mercury stands at 90 deg. there is no propriety in man or beasts working, certainly in cities where there is not only more heat, but less vitality in the air. Loss of time at midday can be made up by work mornings and evenings.

If any one feels extreme lassitude and has a quickened pulse and a hot skin, work should be entirely intermitted. In nine cases out of ten no medicine is necessary. The two great restorers of exhausted nature are sleep and food. Farmers as a general rule do not sleep enough. It is a great mistake to suppose that the time spent in sleep is lost. A nap in the middle of one of these hot days is worth more than a bottle of bitters to give tone to the system. The diet also should be simple and cooling. Eschew fat pork and rich gravies in the summer. Potluck answers well for wood choppers in the winter, but nature rebels against such heat-producing food in these dog-days. Above all, avoid intoxicating drinks. The great majority of the sun-struck are whiskey struck in the first place, and it is not one glass that kills. Statistics show that habitual inebriates, those whose system has been inflamed by long and excessive use of stimulants, are most liable to sun-stroke. Milk and water makes a better drink in the hayfield than whiskey. Milk is also a most excellent article of diet in warm weather, cooling and strengthening at the same time.

As a precaution against a rush of blood to the head, put some fresh grass in the top of the hat, or wet a cloth in cold water and keep it on the head, often renewing the wetting. In case of vertigo lose no time in applying icewater to the head and spine, and the patient may be wrapped in a sheet and sprinkled with cold water. The temperature of the body must be reduced to 100 degrees, or death will ensue. Bleeding, the heroic treatment, was formerly resorted to in case of sun-stroke, but experience has shown the superior power of cold water to relieve the pressure on the brain.

KILLING WORTHLESS HORSES.

ENTRANCE OF AIR INTO VEINS, CAUSING DEATH.

It is a well known fact that the accidental admission of air into veins during surgical operations, has in many cases caused the death of the patient. The knowledge thus gained has been utilized to destroy old and otherwise worthless horses. The instruments used are a fleam and a gutta percha catheter. The manner of operating is to open the vein as in bleeding, then introduce the tube into the vein passing it downwards towards the heart; three full inflations of the lungs are rapidly passed through the tube, when it is advisable for the operator to stand one side, for the animal falls instantaneously—without warning. A few struggles for breath and the animal is dead. To prevent the attempt to breathe, an assistant, as soon as the animal falls, draws the nose toward the windpipe, when a long narrow blade of a knife is passed between the occiput and first bone of the neck perpendicularly, dividing the medulla spinalis, causing instant death. * "The mode of death caused by the entrance of air is as follows: The blood becoming mingled with air assumes a frothy character in the right ventricle; it is sent through the pulmonary artery, but becomes more or less arrested in the pulmonic capillaries, in consequence of the right ventricle being unable to overcome the mechanical obstacle presented by air bubbles in these vessels. The quantity of blood transmitted through the lungs for the systemic circulation grows less and less, according to the increase of obstruction and the arrest of the blood in the capillaries of the lungs; the supply to the head is inadequate to afford due stimulus to the nervous centres, and syncope results. If circulation is not restored this continues; the respiratory movements then cease, and life becomes extinct, the heart last failing in its action from want of necessary stimulus—the blood." There are doubtless other modes of killing, equally painless—a well directed bullet, or a blow in the right place with a pole axe. Yet it is a fact, which the writer has often been obliged to witness, that the poor animals have been cruelly pounded on the head, and in others several bullets shot into the quivering flesh before the vital spot was reached.

From the above description it is evident that it requires some knowledge of the structure, also considerable practice to become an expert in performing the operation on horses; in animals with thick fat necks it is sometimes difficult to find the opening into the veins; should the horse raise or lower the head, or turn it either to one side or the other, the position of the orifice is changed, sometimes requiring many attempts before the tube can be inserted.

We trust that some plan may be devised by which the lives of animals can be destroyed without causing so much suffering.

*Prof. Williams.

A PRECOCIOUS COW.

Mr. M. M. Hale, of Hanson, has a cow, fifteen months, which had a calf when thirteen months old. She is three-fourths Jersey, weighs six hundred and fifty pounds, handsome, and has nearly every mark of a good cow. Calf good size and form. No apparent evil result to cow. Mammary gland good sized, teats well developed.

TABLE REFUSE FOR POULTRY.

First, a proper feeding pail is an absolute necessity to successfully prepare the refuse of the table and kitchen, to make it proper food for fowls. Get a hard-wood pail, or ask your grocer for a hard-wood butter firkin shaped like a pail. Cut a board to fit into the chine firmly on the whole bottom of the pail, and thick enough to project an inch or more beyond the ends of the staves, so that the pail may rest firmly on the bottom instead of on the ends of the staves. Fasten it in place by a few nails driven through the staves into this false bottom, which may be of pine, as it is only to keep from bursting out the bottom of the pail by chopping in it. If you can not get a hard-wood pail, put another false bottom of hard-wood inside of a pine pail, nicely fitted and secured like the under one. Grind the edge of a common spade sharp, and you have an admirable chopping-knife, and will be surprised to see how quickly you can chop fine all scraps and waste of every kind, cooked or raw vegetables, chicken bones, and everything except beef, pork or mutton bones; these save by themselves and put into a stock soup kettle, with all pieces of raw meat, or cheap meat from the market, and keep it on the kitchen stove as much of the day as you can induce your "better half" to let it remain. After boiling several days some of these large bones will chop up fine with the other waste, and can be used as fast as they become soft. Chop up the waste each morning, adding meal and shorts enough for a breakfast for the flocks; scald the whole with the soup from the stock kettle, adding once each week one of the following articles for each twenty-five hens: One teaspoonful pepper, six onions, one-half pint charcoal, one teaspoon pure vinegar, and two teaspoonfuls sulphur, etc. The above will produce a breakfast that will make your poultry-house and its occupants as lively and musical as a first-class opera house.—*American Poultry Yard.*

HOW TO KNOW A RIPE WATER-MELON.

When the melon begins to change color inside, and its seeds to turn black, a small black speck, scale or blister begins to appear on the outer cuticle, or rind. These are multiplied and enlarged as the fruit matures. A ripe melon will show them thickly sown over the surface. A partial development only indicates half ripened fruit. A full crop of blisters reveals its perfect ripeness. When hundreds of melons are strewn along the sidewalk, you will have to look pretty sharply to find one that exhibits a satisfactory "escutcheon," to borrow a term from M. Guenon. But it is unfailing, when found, and by following this guide you may walk away with your melon with the most entire confidence. The blister is only to be seen upon a close inspection, but is plainly visible when that is given.—*Ex.*

GOVERNMENT WHITE-WASH.—The mixture known as Government white-wash, because it is used on light-houses, forts, and other government buildings, is made as follows: Slake half a bushel good lime in boiling water in a covered vessel, and strain it through a fine sieve; add a peck of salt, dissolved in a small quantity of hot water, three pounds of rice boiled with water to a thin paste, one pound of Spanish whiting, one pound of glue softened by soaking in water and then dissolved over a water-bath, and five gallons of hot water. Agitate, cover from dust, and allow to stand for several days; apply hot. Slaked lime or hydraulic cement mixed with skimmed milk makes a cheap and durable paint for outdoor work.

Written expressly for the Massachusetts Ploughman.

THE FARMER'S FAMILY.

BY ALEXANDER HYDE.

Farmers are so engrossed with the cares of the field that they are tempted to neglect the equally important duties of the family. They look sharply after the calves and the lambs, the colts are carefully trained, much labor and no little patience are bestowed upon the favorite steers, and even the chickens are watched and fed with assiduous attention; but the little "duckies" in the house are turned off on the mother, and sometimes are left to the sole care of some hireling. Now there is no stock a farmer can raise that can compare in value, or will pay a hundredth part as well, as a flock of well-bred children. The good book says, "Children are the heritage of the Lord, and are as arrows in the hand of a mighty man. Happy is the man that hath his quiver full of them." But to make them as arrows, swift to accomplish our will, they need more careful training than colts, and they need the attentions of both father and mother. It is seldom that a family of children brought up by the mother alone or the father alone are properly developed. The tenderness of the mother is wont to lead her to make a slave of herself and to require little or no labor on the part of the children, and thus they become accustomed to a life of ease and self-indulgence, and are mere drones in society. Even if the mother is too wise to sacrifice herself and children in this way, there are few women fitted by education and mingling with the world to develop true manhood in their children. Some can do it, but they are the exception. The Creator designed that the responsibility of educating children—using the word education in its original sense of bringing out all the faculties, physical, intellectual and moral—should devolve upon both parents; and the man who shirks this responsibility sins against the first law of the family. We have great faith in woman, and in her power to mould infant minds; but men see things from a different standpoint from women, and a certain masculine influence is necessary when the children get to an age that requires a strong will to direct them; and this age is reached sooner than most men suspect.

It has been frequently said, so frequently that it has passed into a proverb, "No matter who the father is, if the mother is all right." Farmers know better than this. In breeding domestic animals they know this rule would not work. Sometimes the male and sometimes the female impresses the offspring most markedly, but to secure a thoroughbred animal, whether of the genus los, or genus homo, both sire and mother must be all right. It were well if men and women thought more of this when making matrimonial alliances, but if there has been any mistake in the alliance, then there is a double obligation to look well to the training of the offspring in order by education to remedy any defects of nature.

"As the twig is bent the tree is inclined," is another proverb which is only partially true. We can't make an oak out of an alder sapling with all the bending and coaxing we may bestow upon it; but we can make a straight and vigorous alder out of a crooked and feeble alder twig. We have had some experience in training boys and the more we had to do with them the more convinced we were that their capacity was born in them, and could not be bought as a mother once asked a schoolmaster to do for her dull boy. Still education has much to do in moulding the faculties, and there is no education like that of the family, and no school-master has such advantages for influencing children as has the father. They look to him as their natural friend and protector, and no father, whether farmer or manufacturer, or merchant, has a right to forego the opportunities which the relation affords and improves. A word from him has more power than a sermon from the minister, and a long lesson from the schoolmaster.

We hear farmers complaining that their sons are not inclined to remain on the farm, do not love to work, are spendthrifts, and so on, with a long catalogue of complaints. We wonder if these complainants ever thought that most of the blame rested on their own shoulders. Had they given as much time to the education of their sons as they gave to the education of their colts and steers, we doubt whether there would have been much cause for complaint. If they would early talk with their boys, yea, and consult with them as to farming matters, give them a little plot of land to cultivate, and the profits of its products, a lamb to bring up, and a flock of chickens to take care of as their own, in all probability their sons would have developed into farmers as naturally as a chick into a fowl.

Neither should the intercourse between father and sons be confined to their labors in the field. There should be home recreations in which parents and children can participate. Reading, riding, fishing, and games should be sandwiched in with work. When the farmer goes to the village he should, if convenient, ask the mother and daughter to ride with him, and on the route take as much pains to entertain them as though they were guests. We have heard of a farmer who, when asked by his wife or daughter if they could go to ride, always answered, "You can have a horse but you can't have me; I am too busy." Industry is a good thing, but it is a man's business to look after his family as well as after his flocks and herds, and he who neglects his family must expect the same results as when the flocks are neglected. Which is the more important to be attended to, the family or the farm, we are willing to leave to the judgment of the farmer himself.

BE GENTLE WHEN YOU MILK.

The advantage of kindness to cows has been frequently insisted on in these pages, and is well illustrated by the following anecdote: A man had a fine cow that, week after week, was milked alternately by a couple of hired men. He observed that the amount of butter he carried weighed about a pound more each alternate week. He watched the men and tried the cow after they had finished milking, but always found that no milk had been left in the teats. Finally he asked the Scotch girl who took care of the milk, if she could account for the difference. "Why, yes," said she. "When Jim milks, he says to the old cow: 'So, my pretty muley; so!' But when Sam milks, he hits her on the hip with the edge of the pail, and says: 'H'ist you old brute!'"—*Exchange.*

Horticulture.

Written expressly for the Massachusetts Ploughman.

VISITING THE STRAWBERRY GARDEN.

Notes by the Wayside.

The season that has just passed has been a peculiar one in some respects, and as we walk to and fro among the different varieties, we are led to recall to mind how the late frost in May grasped in its icy fingers some of the most promising fruit stalks of this variety, and then skipping that one near at hand, seemed to know only too well the location of our greatest treasures. Later on came the copious and frequent rains, swelling to the utmost limit what fruit the frost had left us, and as we walk along noting each, we remember with pleasure the splendid berries and rich feasts that many of them afforded us. Thus did nature make up to us for the havoc performed by her destructive frosts. But we will continue our examination of the various occupants of the garden. Now we come to a variety—a favorite of former years,—but now so far eclipsed by some of the more recent arrivals, that we decide that this year has been the last in which it shall occupy our grounds. A little further on, with its light green foliage thickly covering the ground, is a comparative stranger, the envy of its more humble neighbors, but our delight, and we decide that it shall this coming Autumn occupy triple the amount of ground that it now covers. A few feet further on we come to

Kerr's Late Prolific—Not a remarkable berry, and yet possessed of so many sterling qualities, that we are led to single it out, and point out its traits of value, as well as those of demerit. Its name reveals its two qualities of greatest value—lateness and productiveness, and the fact that it continues to yield fine crops of fruit, days, yes almost weeks after many another variety has ceased bearing, will certainly render it a favorite with many. It is the possessor of other good qualities, and perhaps the chief of these is its adaptation to heavy clay soils, as well as to those of lighter texture. Among its demerits, if such they can be called, is its moderate size, only one single berry measuring six inches in circumference but most of them much smaller. However, one of my correspondents seems to have met with much better success—growing one berry almost nine inches in measurement. Again it is only moderately firm for shipping—a quality however that many lovers of this fruit will say concerns them not.

Pioneer, or "King of the North," now attracts our attention, and right royally did it bestow its wonderful gifts. Its very early time of ripening will commend it to many who have long sought for a large variety that would ripen some days ahead of the ordinary kinds. We certainly do not wonder that many persons like to have early varieties also in their gardens, as it was a pleasure indeed to commence with the early berries on the 26th of last May, which together with the medium and late varieties continued to furnish an almost unbroken feast up to the sixth of July. The berries of the *Pioneer* are of good quality, of a bright red color, and sometimes very large, measuring in the vicinity of eight inches in circumference. Let no one suppose, however, that these mammoth berries can be obtained by simply putting the plants in the ground, and afterwards neglecting them, as a rich soil and freedom from weeds are very important items in obtaining them.

Col. Cheney would be a favorite if the quality of the fruit was not at times so inferior. However, we do not have to search long among our fifty or sixty varieties before finding plenty of treasures to make amends for what it lacks. *Forest Rose, President Lincoln, Crescent Seedling and Great American*, with their four to eleven inch berries, each appear in turn to claim our attention, but we must defer their claims until some other time.

We are more and more pleased with the comparatively new method of increasing our plantations in August and September, by setting out plants that have been previously started in small 2 1-2 inch flower-pots, as they grow so vigorously as to give us nearly a full crop of berries in less than ten months. These pot-grown plants are excellent for sending to a distance, as many of my friends and correspondents report having equal success with those that I have sent to them. Perhaps, at some future time, I may be permitted to give some hints, as to the best ways to be employed in growing these extra large berries.

E. H. H.

The Dairy.

BUTTER MAKING.

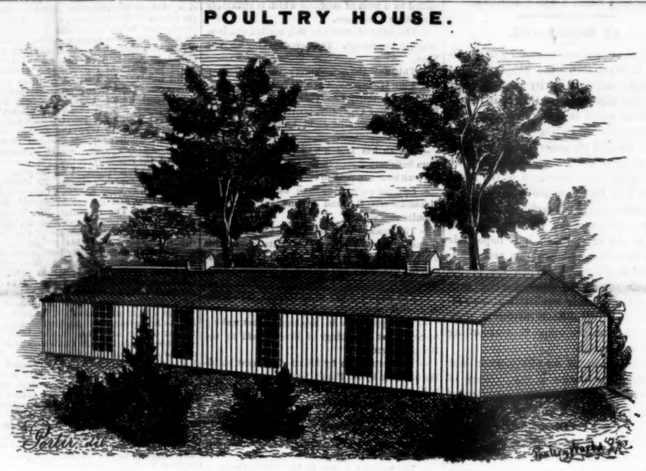
Every neighborhood has its good and poor butter makers and ours is no exception. Among our best is Miss U. who in answer to several questions touching the butter subject, gave me a brief outline of her method. She is at present making butter from three cows, two of them Alderneys, and averages from twenty to twenty-five pounds a week. Her cellar is quite cool, scrupulously clean, as are also the pans, pails etc. The milk is strained into both deep and shallow pans and Miss C. says she has yet to discover that the cream rises in one better than in the other.

The churning is done twice a week winter or summer, not oftener, and ice is never used. From twenty to twenty-five quarts of cream, including some thick milk, is the average churning; and time, from fifteen to twenty minutes to do it in. After churning about five minutes, she pours in two quarts of *boiling* water. This she never omits, except it may be in the hottest of weather. As soon as the butter commences to gather, two or three quarts of cold water are added, and the test when sufficiently gathered, is, "when the butter holds up the dash." The butter is then taken up into a wooden bowl and worked and washed with the ladle in two or three cold waters, that the milk may be all washed out; then salted, worked through and through and set aside for three or four hours, occasionally working it in the meanwhile. At the end of this time it receives the final working, and is weighed out and made into prints for market.—*Rural New Yorker.*

☞ It is said that so acute is the sheep's sense of hearing that she can distinguish the cry of her own lamb among as many as a thousand others all bleating at the same time; and the lamb, too, is able to recognise its mother's voice even though it be in the midst of a large flock.

☞ The number of cattle annually slaughtered in this country is 7,500,000.

POULTRY HOUSE.



OWNED BY R. G BUFFINTON, SOMERSET, MASS.

Mr. Buffinton, in writing to the *Poultry World*, says: "The cost of such a house depends something on location and cost of lumber. This one is 40 feet long, 10 wide, and 5 1-2 high. The south side contains five windows, and the spaces between them are battened. There is a door in each end and two ventilators in the roof. It is divided into five apartments 8x7 1-1 feet, an alleyway 2 1-2 feet wide running the entire length of the north side. The windows can be raised from the alleyway by means of ropes and pulleys. The fowls go out of the windows into the yards, which are 8x40 feet. The partitions are made of spruce, 3 inch wide by 1-2 inch thick, two inches apart, except two feet from the ground, which is boarded, to keep the fowls from fighting through the slats. I have a hogshead set on the north side and spouts leading to it so that the water may be drawn inside. This will not answer, however, in cold weather. The house is built of the best of material, is whitewashed; its doors, trimmings and battens painted. A house on this plan can be built any length, according to the number of varieties to be kept. I have quite a number of smaller houses, as I am breeding ten varieties, besides ducks, turkeys, geese and guinea fowl."

The Farm.

MOSS IN OLD PASTURES.

A Scotch correspondent of the London *Journal of Forestry* in an article on "improving and laying down of permanent pasture," refers to the above subject as follows:

A still more formidable enemy to restrain and extirpate in old pastures is the encroachments of the mosses. They are to be found thriving more or less in almost all situations, and in every description of soil, but more particularly are they to be found in all their luxuriance on moist, inferior soils. Where it is inconvenient or undesirable to plough up and crop land thus overrun with coarse grass and moss, something may be done to eradicate them by going over the surface with sharp close-teethed harrows, and recrossing till the moss is thoroughly scratched up; clean off the rubbish, and therefore apply a good top dressing of lime, or lime compost. Unquestionably pure lime is preferable, and put on as hot as it can be conveniently applied, at the rate of from five to six tons per imperial acre. The months of February and up to the middle of March, would seem to be the best time for this occupation. After the lime has got a good shower of rain, brush or chain harrow it well into the ground, removing all rubbish gathered up by the harrows, refuse of the lime, &c.

In about a month afterwards, and not later than the middle of April, sow a mixture of the best permanent grass seeds, at the rate of from twenty to thirty pounds per acre, which can be obtained mixed and ready, and suitable to the nature of the soil, from the seedsman with whom you are in the habit of dealing. If there be any tufts or tussocks of coarse grass it would be well to root them out. Brush harrow again, and finish up by rolling with a heavy roller. On sheltered rich lawns, and parks surrounding mansion houses, where sheep only are grazed, and where from various causes, the pasture is not eaten sufficiently bare by the sheep, we have seen moss and decayed vegetable matter collecting on the surface to a depth of an inch and a half, the ground feeling like a Turkey carpet under the feet. To such a length does this sometimes go that sheep cannot be kept more than a couple of months upon it before every animal is affected by foot-rot. In the end of the year we have seen the expedient tried of putting on for a few months an extraordinary stock of hardy wintering sheep, for the purpose of baring it down as far as possible. In some instances we have seen a crop or two of hay cut, the second year's crop being the heaviest, best quality, and easiest to cut. After the first crop has been removed a perceptible decrease in the thickness and sponginess of the surface will be noticeable, and if the second crop is a heavy one, and closely cut, all superfluous sward and moss will have disappeared. The following year the grass will be much cleaner and finer, and the sheep stock can be kept on throughout the season. We have seen a lawn so treated let for the season's grazing at an increase of one pound per acre, while the hay crop of the two preceding seasons yielded a profitable return. But, as our agricultural friends are aware, the best of these methods for improving permanent pasture are but half measures, and are not always attended with the desired results.

If old and worn out pastures are to be improved in the general sense of the term, wherever it is at all practicable to do so, we unhesitatingly say plough up and give a systematic and thorough course of cropping. Plough in the autumn, and have it completed before the end of the year, so as to allow it to get as much of the winter frosts as possible, and rot the tough surface which is turned down. See that the furrows are laid over firmly and in such a position that they will not open back, as old tough lea is liable to do, more especially where the furrows are laid up-hill or against the hand, and thus a quantity of seed would fall between, and to some extent be lost. In this, the western district of Pethshire, the rotation followed, is the five, six or seven years' course. We sow with oats for the first crop, and if necessary give along with the seed at the time of sowing a liberal application of guano mixed with dissolved bones; this insures a heavy crop, which chokes and destroys the weeds. After the removal of the crop commence to cross plough deeply, accompanied, if practicable, by subsoiling, finishing and ploughing as early as possible, for the sake of the beneficial action of the atmosphere on the soil. In spring work up the land thoroughly, great care being taken that all noxious weeds of every description are gathered, and either burned on the ground or removed. A crop of turnips or potatoes may then be taken, but the fewer of the latter the better for the land. Apply from fifteen to twenty tons of farmyard manure, and three or four cwts. of artificial per acre. If farmyard manure is scarce, apply less, and add more of the artificial, and it wholly sown with the latter, apply from eight to ten cwt. per acre, and if the quality is good (a matter at times open to doubt), and no other drawback occurs, a good crop of either turnips or potatoes may be expected.

☞ Moths fly by night because they are organized to enjoy subdued light and cool air; and, as they take very little food during the short life they have in the winged state, they find sufficient by night. Some of the moths, like that of the silk-worm, take no food from the time they escape from the chrysalis until they die. Moths also form the food of bats, owls, and other of the night-flying tribes.

The Horse.

TELLING A HORSE'S AGE.

Prof. Young, in the *Spirit of the Times*, in giving instructions as to the way of telling a horse's age, says:

Teeth are, as a rule, of an irregular cone-like shape, the base being toward the interior of the mouth, the superior portions being placed exterior to the inferior, instead of perpendicularly, as they would appear to the casual observer. The gum is the dividing line; that portion immediately in contact with the upper portion of the gum and immediately above and below it, is called the cervix, or neck, the fangs or roots being imbedded in the avelona, or sockets, of the superior and inferior maxillaries respectively. The incisors are situated in the front of the mouth, and as they are the ones we will have most to say about, we will give a description of them, and subsequently direct special attention to the changes that take place in them as the animal advances in age.

Teeth are considered to be active agents in mastication. Their mode of development is the same in all our domesticated animals. Those placed together in front, at the middle of the dental arch, are called the incisors or incitive teeth; those situated behind these (two in the superior and two in the inferior maxillary) and denominated canine teeth, or rushes; those which occupy the more concealed portion of the mouth are called molars or grinders. A horse has forty teeth, composed of twelve incisors, four tushes, and twenty-four molars; the mare has corresponding teeth, except the tushes, which are in the female, almost invariably absent, hence she has only thirty-six. All teeth are composed essentially of enamel, dentine and crusto petrosa. A curious but remarkable fact presents itself respecting the growth of horses' teeth, which is not common to other animals, namely, that the teeth are growing continually from their development to the animal's death. They are forced up from their sockets to supply the material removed by attrition. Tushes are never shed, they make their appearance between the animal's fourth and a half and fifth year, hence if they are just protruding we know, without any confirmatory evidence, the horse's age. Either at birth, or from one to four days afterwards, the colt has four milk teeth called the centrals,

The lateral teeth appear between four and six weeks after birth, the corner teeth about the eighth month. The centrals, or those which first make their appearence, are shed between two and a half and three years: the corner teeth between four and a half and five. About this time, or a little before the tushes are full grown, the animal is said, in horseman's phraseology, to have a full mouth.

We come now to the important part of the subject, where an animal's age is determined by the appearance of the black spots, or more correctly, the infundibulum. The infundibulum or black marks, are worn out of the superior or smooth surface of the lower jaw at six years old, and that of the lateral are commencing to disappear, and is completed at the seventh year; thus at this age we find the wearing surfaces of both central and lateral inferior teeth smooth, the black marks having been worn away by attrition, and the marks of the corner teeth begin to disappear, and have entirely disappeared when the animal becomes eight years old. The horse is now considered "aged," and no conscientious veterinary surgeon or horseman would positively assert the animal's age, only approximately. Some people aver they can determine the exact age by signs other than the teeth, but such indications are unreliable.

As the animal advances in age his teeth gradually grow long, and appear to become more horizontal. The mouth, which at five years old was pug-shaped, now loses its appearance and becomes elongated. The teeth which were in the age last mentioned, nearly perpendicular are now slanting: and this process appears with advancing age. As a horse becomes old the enamel loses its original beautiful whiteness and assumes a cloudy or smoky yellow instead, and becomes striated with brown and black marks, and the tushes infrequently drop.

EGGS FOR COLTS.

Mr. Rowe Emery tells in the *Maine Farmer* how he raised a premium colt, after weaning time as follows: "I took him to the stable Oct. 24, 1877, and commenced to give him grain. I gave him one quart per day for the first month. I increased his oats each month so that in March I was giving him eight quarts per day. The third month I commenced to give him six eggs per day, two mixed with each feed. He weighed, Oct. 24, 1877, 300 pounds. This morning, June 3, 1878, he weighed 587 pounds, and stands 14 hands high. I took the eggs away from him the first day of April, and commenced to cut his oats down the first of May. I am now giving him four quarts of oats per day and all the grass he will eat. I keep him in a room ten feet square, cut his grass for him and give him halter exercise twice a day, and I think he is now growing faster than ever before. He has consumed from Oct. 24, 1877, to June 1, 1878, 32 1-2 bushels of oats, 45 dozen eggs, 3 bushels of potatoes and 1,200 pounds of hay."

☞ Canadian farmers claim that six bushels of peas are equal to ten bushels of corn for fattening hogs, and that peas will yield a larger number of bushels per acre than corn. The pork made from peas is most excellent.

☞ Neither indian corn, nor potatoes, nor squashes, nor carrots, nor cabbages, nor turnips, were known in England until the sixteenth century.

Stock Department.

CLOVER BLOAT IN CATTLE.

A Missouri correspondent complains that cows become hoven after eating red clover, especially if the forage is wet; another correspondent advises tying a thick straw rope in the mouth so as to keep the jaws apart. This method is usually successful, the separation of the jaws at once preventing the swallowing of saliva and air, and favoring the belching of gas from the paunch. A billet of wood two and a half or three inches in diameter may advantageously replace the straw rope, may be tied in by a cord from each end, carried up and tied behind the horns, and worn for hours until the danger is past. It is well, however, not to leave the fermentation in the stomach to proceed unchecked, when it can easily be put a stop to by giving one ounce of oil of turpentine in a pint of linseed oil. An ounce of tar, or of chloride of lime will usually serve a similar purpose. The treatment by a gag is even better adapted to cases of choking than to simple bloating. In both cases alike if the distention of the paunch is extreme, relief should be sought on the instant by plunging a pocket-knife into the left flank at a point midway between the last rib and the hip bone, and eight or ten inches down from the back-bone. A canula and trocher is a better instrument, but every instant is most precious, and a pocket-knife may be used with perfect safety. The bloating can only be prevented by keeping the stock from the clover when wet, or when just dry after a shower or heavy dew. If put out hungry, cattle will usually overload the paunch with clover, bringing on indigestion and swelling. Hence they should be fed before being first turned on clover; they should be turned out only for an hour at a time for the first day, and should not be left out all day until the green food has gone through them. In case of showers when cattle are on long, rank, flowering clover, it is safe to turn them for a time into a barn-field or yard.—*New York Tribune.*

ACREAGE REQUIRED FOR A COW.

How much land is required for the support of a cow? This question depends for an answer so much on the circumstances of the soil as not to admit of a very definite answer. Mr. Schuil, of Little Falls, N. Y., estimates that the land in pasturage and hay requisite for the support of a cow is three acres; and this is the estimate of Mr. Carrington for moderately good dairy farms in England. In Belgium ten acres of land support two cows, one heifer, and one yearling or calf; but when the calves are sold off young, and cows in full milk are only kept, the proportion is two cows to seven and one-half acres. Colman estimates three acres of pasture as requisite for a cow in Berkshire county, Mass., while in some towns two acres of pasturage are sufficient. Mr. Farrington, in the Report of the American Dairymen's Association, thinks that on the average four acres are required per cow, for summer and winter keep; while Mr. X. A. Willard thinks that in Herkimer county, N. Y., one and one-half to two acres of pasture per cow will answer, and in some exceptional cases one acre.—*Scientific Farmer.*

RINDERPEST IN TURKEY.

Constantinople letters have been received in England stating that the rinderpest is raging and rapidly carrying off the cattle in Turkey which have escaped the ravages of war. Thousands of cattle are dying every week in the vicinity of Smyrna and Hudavendighiar; and unless the government promptly adopt and put in force energetic and vigorous measures to prevent the further spread of the contagion, it is feared one of the richest sources of the wealth of Turkey will be destroyed. Meat is becoming scarce in the capital, and thus another is added to the list of horrors that inevitably follow war.

The Apiary.

HOW TO PREVENT SWARMING.

I am satisfied that bees will not swarm if their hive is comfortable, and if they have plenty of room to store honey. Two years ago I had a swarm issue from a populous and prosperous hive, and the queen being clipped, they returned. I immediately gave the hive a thorough ventilation, and though I did not destroy any queen cells, there was no further attempt to swarm. A few days ago I opened the hive, and found the same queen that came out two years ago. The colony is now, and has been ever since, one of my best, and during the two years, nearly, since the time above referred to, there has been no sign of swarming. Ventilation, to be effective, must not only be at the bottom but at the top of the hive. To secure thorough ventilation, there should be a honey-board with a little space (about one-quarter of an inch) between it and the top of the frames. In the honey-board there should be openings covered with wire cloth tacked immediately on the board. Ventilate your bees thoroughly in hot weather, and keep the honey out of their way, and you will not be troubled with swarming.—*American Bee Journal.*

☞ All meat producing animals should be killed when they are in the coolest state, or when respiration is the least active. Their flesh will then keep much longer fresh, and be more beautiful, sweet and healthful. When killed in a heated condition, or immediately after a hard drive, the flesh will take longer to cool through, spoil sooner, while the flesh and fat will have a dark, feverish look, caused by being full of blood, and hence will not be so inviting in appearance or so healthy as food.

Scientific.

Written expressly for the Massachusetts Ploughman.

CHEMISTRY IN FRUIT CULTURE.

NUMBER V.

BY PROFESSOR C. A. GOESSMANN.

THE GRAPE.

Influence of Girdling the Vines on the Growth of the Grapes.

To obtain more definite information regarding the influence which the girdling of the vines exerts on the growth and the composition of the grapes raised on such plants than our somewhat contradictory current reports are apt to convey, I planned,—and with the kind assistance of Professor S. T. Maynard and of Mr. E. B. Bragg, of the class of '75, commenced during the earlier part of the summer of 1877 a series of experiments. As the results thus far obtained are not without some interest from a mere practical standpoint, I propose to describe subsequently the course of operation pursued during the past years, and to enumerate also some of the more prominent facts ascertained by means of a careful chemical examination of the grapes grown on *girdled* plants or parts of these vines, as compared with those raised on *ungirdled* ones of a corresponding stage of development, and planted upon the same grounds. Although six different varieties of grape vines served in the experiments of the first year,—1877—it was thought best to select one as the principal one for a more careful study; the Concord was chosen for that purpose. The vines without any distinction were girdled during the first week of August; the free acid of the berries of the Concord grapes had just reached its largest percentage;—the sugar had begun to increase at a more perceptible rate; and the purple color had made its first appearance in their stems. Entire vines, as well as large branches, were girdled. The girdling in both instances was carried out in the following manner: two incisions from one-eighth to one-fourth of an inch apart were made through the bark—down to the wood, and the mass between these cuts carefully removed. A difference in the growth of the grapes on the girdled and the ungirdled plants became soon noticeable, and showed itself in a marked degree, when the grapes on the girdled branches had just reached their ripeness. Judging from previous observations regarding the normal rate of growth of the Concord grape, cultivated upon the College grounds, it seems quite safe to state that the grapes on the girdled vines were from two to three weeks in advance of those on the ungirdled ones,—and at the same time of an excellent quality. A careful comparison of a detailed statement concerning the usual rate of growth in the case of the Concord grape, published in the *Ploughman* March 30th, 1878, with the observations reported below, can leave but little doubt about that interesting fact. Some of the statements subsequently made show less conspicuous differences in the composition of both kinds of grapes than others, although the grapes of the same variety of vines were, without exception, tested on the same date. This circumstance might be assumed to be due in some degree to a peculiar feature in the growth of varieties of grapes not yet investigated; yet it seems quite safe to ascribe in the main the result to the fact that the examinations in these cases, for some reason or other have been delayed beyond the exact point of ripeness of the grape from the girdled branches. This view of the question is strongly supported by the observation that the grapes, after having once reached the normal development for the particular season they are grown in, change but slowly, and degenerate sooner or later gradually on the vines according to more or less favorable climatical influences. The difference in their stage of growth towards the close of the growing season,—as far as the composition or the quality of the grapes are concerned, are therefore rendered less marked by several distinct causes. The history of the changes noticed in the growth of the Concord grape, which is given further on in the course of the present communication, furnishes a strong argument in favor of the opinion previously advocated. As there were no other differences noticeable between the grapes raised on the girdled and the ungirdled vines,—as far as their general character was concerned,—than those due to a more or less advanced state of growth, I propose to confine my report here merely to an enumeration of a few points of characteristical importance for a proper elucidation of the particular stage of development the grapes in each case have attained.

1.—HARTFORD PROLIFIC.
Vine not Girdled.

| Date. 1877. | Specific gravity of the Berries. | Temperature Centigrades. | Percentage of Grape Sugar in Juice. |

moon has paled all these lights and flooded the bay with a silvery sheen.

Previous to 1875, this island was owned by a Mr. Johnson, who expended on it—including a $9,000 stone cottage—over $30,000. In that year Messrs. L. L. Morrison, R. W. Haines, W. R. G. Estes, Geo. N. Page, and S. J. Walton, the present owners, all of Skowhegan, with seven others bought the island for their own summer resort. The year following there was such a rush here during the heated term that notwithstanding the very limited accommodations, ninety people were lodged and fed for a time, with "more to follow." An old farm or fisherman's house was utilized for sleepers, and meals were served in the cottage whose limited dining accommodations required the table to be laid three times in succession. Under such a stimulus the proprietors planned and built this large hotel, the Samoset House, successfully opened last season. It contains 70 rooms, well furnished—with *spring beds and hair mattresses throughout*; a sufficient recommendation for any summer resort, with a higher temperature than is found here. It has 260 feet of piazza, a dining hall 40 feet by 70, and a parlor to correspond.

Besides meats, fish of various kinds fresh from the sea is daily served in various ways. Since fish makes brains we hope soon to be able to produce a (less hasty and) more readable letter. Seven good cows, some of which arrived recently by boat, furnish milk for chowders, ice cream, etc., and for children small and large. For supper it is sometimes drawn fresh from the udder. In case of unexpected numerous arrivals at dinner scarce can be made in the grove pasture, and as in Rome, where the milkmen drive their go(c)s(r)ts to the city, the lacteous fluid is drawn fresh from the original vessels.

Mackarel fishing in the harbor has been quite successful this week, and deep sea cod fishing constantly awaits those who do not fear the demands of Neptune. So far this season Mrs. E. W. Corey, of Arlington, Mass., stands at the head of the list of amateurs for "big fish," she having caught on Independence Day a 20 pounder.

The proprietors are high minded men and law-abiding citizens; and not a drop of strong drink is sold at the Hotel, or tolerated on the Island, so far as their control is concerned—a thing rare and highly commendable. They design to make it a safe and satisfactory summer home for families. A number of the waiters are students—thus helped pecuniarily to continue their studies and afforded an opportunity for reinvigoration. They have now about forty guests, a pleasant company, among them Pres. C. J. Prescott and E. R. Pennoyer and families of Orange, N. J., B. V. Page and wife of Chicago; D. C. Robinson, Esq., and wife; Mr. and Mrs. S. F. Robinson; Mrs. J. W. Bradbury; Mr. and Mrs. H. W. Bradbury, and B. F. Parrott and family of Augusta.

We visited this week the "Porgy Factory," on the main land opposite this Island, and got a few facts and a good deal of *smell*. The company has six steamers for fishing: these go out one to two hundred miles and are gone from three to five days, according to their success in netting. Porgy fishing commences in June. These boats have had fair success this season, so far, having caught 32,000 pounds of fish and turned out 500 cwans of oil last month. The oil is worth about thirty cents a gallon, is sent to Boston and for the most part exported. Fifty barrels of porgies to a vat are steamed for half an hour and then pressed, with a product of about 150 gallons of oil which is drawn or pumped off, and stands in tanks till ready to cask. The foreman said it was very sweet, and suited the action to the words. We reserved our taste—for clam chowder. The scraps are sold for $10 a ton to a company whose works are just at hand, that manufacture phosphates—chiefly for the South. They made last year 13 per cent. on their investment of $100,000. They manufacture their own acid. The lead of the two chambers in which the gas is condensed cost $10,000. Eight parts of nitre are used to 92 parts of sulphur, and each pound is expected to produce three pounds of sulphuric acid.

We called at Boothbay Harbor the same day and found in the office of the Collector of the Port a varied collection of curiosities among them the "shackles worn by John Brown at Harper's Ferry." A pyramid of gold coins was designated "Christian Idol."

The weather here is delightfully cool; one or two evenings this week we have donned an overcoat; one we sat by an open fire in the cottage. The Hotel is so located that the front windows look down and the back up the Bay, giving double frontage.

Some of the readers of the *Ploughman* "undecided where to go" may be glad to learn the prices; a dollar and a half and two dollars a day. Families and groops can secure considerable lower terms for a series of weeks or by going to the top-most floor. The old house referred to—near the landing—has been brushed out and will be opened this week, for those desiring cheaper board, under the charge of A. D. Murray, for years—before it was burned—landlord of the hotel at the "Forks," (of the Kennebec and Dead Rivers), a former resort of lovers of trout fishing. The fare from Boston on a through ticket is only $1,75,—by the Star of the East to Bath, thence by one of the (two daily) agile little steamers of the Eastern Steamboat Company, that ply among the islands. In a previous letter we spoke of the delightful sail of two hours down among the numerous and picturesque islands, with the courteous Captain, G. A. Low, of the Sasanoa. A great crowd is expected here to-morrow to attend a big "hop" in the evening.

To get an extra amount of sleep to-night some of the guests have admonished

LANDINE.

☞ The Providence *Journal* states that the decision arrived at to start the Sagamore Mills, at the meeting of the committee of creditors of the Sagamore Mills on Thursday, was for a short time, not to exceed one month. This will enable the trustees to run out the stock of cotton in process and leave the mill in a better condition for lying idle than what it is in now. Although there has been no definite action taken by the committee as to recommending the creditors in regard to the final disposition of the property, the committee favors the plan of a re-organization by capitalizing the debt, and while they are maturing such plans for presentation to the creditors, they have left with the trustees the price at which they would be willing to sell the property. Objections have been offered by some to the capitalization of the debt in the way proposed, on the ground that many of the creditors are national banks, whose charters will not allow the owning of shares in other corporations. Col. Needham, the National Bank Examiner of this State, was in Fall River last week, and the subject was brought to his attention. He said there was no doubt that, under the circumstances, such national banks had a right to thus hold stock, until they saw an advantageous opportunity to make a change, and, further, that he should so advise. He also cited a case where the course had been adopted in regard to a railroad corporation in this state.

GRASSHOPPERS IN THE FAR WEST.

As the season grows older the war upon the grasshoppers becomes more general all over the territory. In the Missouri Valley the conflict has been long and fierce. The 'hoppers came out early, and are now almost ready to fly, and should none of the winged armies from other sections come in, the crops will be good, notwithstanding great damage has been done. On the Gallatin, it was thought there would but few hatch out. The spring there being cold and stormy, the eggs did not hatch; but late advices inform us that during the hot sunny days of the past two weeks they have come forth in great numbers, and it is feared will yet destroy many crops. On other valleys they have not been so late to come out, but have hatched at intervals; as fast as one army was vanquished by the industrious farmer, another was ready for action. The damage already done, taking the territory throughout, will not reach a fourth of the acreage sown, and if the defense continues as successful the remainder of the season, the harvest will be good.—*Rocky Mountain (Montana) Husbandman.*

The Ploughman.

BOSTON, SATURDAY, JULY 27, 1878

NEW ENGLAND AGRICULTURAL SOCIETY.

FAIR TO BE HELD IN WORCESTER, MASSACHUSETTS.

Headquarters New England Agricultural Society, } No. 45 Milk Street, Boston, July 1, 1878.

To Farmers, Mechanics, Artisans and all other Persons Interested in the Exhibition of the New England Agricultural Society for the year 1878!

The New England Agricultural Society has perfected an arrangement with the Worcester Agricultural Society, by which a joint exhibition will be held in the City of Worcester, Mass., Tuesday Wednesday, Thursday and Friday, Sept. 3d, 4th, 5th, and 6th, 1878.

The Exhibition will open at ten o'clock in the forenoon, on Tuesday, Sept. 3d, and close on the afternoon of Friday, September 6th.

It is designed to make this Exhibition complete in every department and to that end a liberal Premium List is published in the *Massachusetts Ploughman*, and will be issued in pamphlet form at an early day.

Correspondence is invited upon any and all subjects connected with the contemplated Exhibition.

DANIEL NEEDHAM.
Secretary New England Agricultural Society.

NEW ENGLAND AGRICULTURAL SOCIETY.

To the Presidents and Officers of all State, County and Town Agricultural Societies, and toJall Masters of Granges in the New England States,

Greeting:

The *New England Agricultural Society* has perfected arrangements with the Worcester Agricultural Society, to hold the fifteenth annual Fair in the city of Worcester, Massachusetts, commencing the first Tuesday of September and continuing four days. The location of the city of Worcester, is most favorable as a central New England point, and will meet the wants of the people of the New England States better than any other previously selected locality for the holding of the New England Fair. Already letters in large numbers have been received from every part of New England; written by farmers and agriculturists who contemplate making exhibition of their products at the great gathering.

Premium lists are nearly ready for delivery, and will be sent free by mail to all persons who will apply to Daniel Needham, Bostor, Mass., or Geo. H. Estabrook, Worcester, Massachusetts.

The local central office will be at No. 344 Main street, Worcester, Mass., Geo. H. Estabrook, local Secretary. The office at 45 Milk street, Boston, will be open from eight a. M. to six P. M.,—and some one or more persons will be in constant attendance.

The enthusiasm with which the people have greeted the location of the Fair, at Worcester, and the offers of both the New England and Worcester Agricultural Societies to believe that the Fair of 1878 will be in every respect the largest and most useful of the exhibitions of the New England Society.

DANIEL NEEDHAM, Secretary.
Boston, July 10th, 1878.

NEW ENGLAND FAIR.

EXECUTIVE COMMITTEE MEETING.

A meeting consisting of the executive officers of the New England and Worcester Agricultural Societies, was held at the office of the Secretary of the Worcester Agricultural Society in the city of Worcester, on Saturday, July 20th. Hon. Geo. B. Loring, Hon. Daniel Needham and Col. Geo. W. Riddle, represented the New England Society, and His Honor, Mayor Pratt, Geo. H. Estabrook, Esq., Messrs. Hartshorn, Salisbury, Fayerweather and other gentlemen represented the Worcester Society.

Matters in connection with the Fair in September were fully discussed.

It was voted to instruct the Committee to award a gratuity to meritorious Fat cattle.

After other minor business was transacted the whole party took a drive to the Fair Grounds.

Active work on the grounds will commence this week.

Worcester is alive to the great work of preparation.

Accommodations will be secured for the entertainment of all that come—and it is estimated that from fifty to seventy-five thousand will be present on Wednesday and Thursday Sept. 4th and 5th.

The Headquarters of the officers will be secured at the Bay State House, Worcester.

The Premium List is already printed and nearly ready for delivery.

Fifteen thousand copies of the pamphlet premium list have been prepared. It is a valuable work for permanent reference and may well be preserved in Agricultural Libraries as it contains the Scale of Points of all recognized breeds of cattle. *Send for the pamphlet to G. H. Estabrook, Worcester, Mass., or to Daniel Needham, Secretary New England Society, Boston.*

CORRECTION.—We learn from the Secretary of the Massachusetts Board of Agriculture that the Worcester North Agricultural Society's Fair at Fitchburg will be held *two days*, instead of *one*, as previously announced in the *Ploughman*. See list of Fairs in another column.

The decease of Judge Shepley, of the First Circuit Court of the United States, has set numerous speculations going in respect to his successor.

In the last five months, $113,000,000 have been subscribed for the new four per cent. loan, and of this amount $37,000,000 has been taken in small sums directly by the people.

Ordinary people of a business turn are asking what is the use of directors in a corporation, if its affairs are left wholly to the management of the Treasurer.

The Treasury Department has issued a call for the redemption of five millions of five-twenty bonds of 1865, half being of the registered class and half coupons.

The defalcation of Mr. John G. Tappan, the Treasurer of the Boston Belting Company, occasions general surprise and is the theme of universal comment. Business circles are greatly excited over a disclosure that amounts to an event.

The almost October weather refreshes every one. Coming so soon upon the prolonged heated term, it was particularly grateful. Yet it must be obvious to all that such weather as this right along would not make very heavy crops.

It is generally held by capable writers and those public journals which are in a position to give a trustworthy opinion, that the business prospects are steadily improving and that another year will prove to be one of at least comparative prosperity.

THE FEELING IN ENGLAND.

Gladstone has come out hotly against Beaconsfield's doings at the Berlin Congress, and Mr. W. E. Forster takes similar ground, declaring it to be that on which the Opposition is agreed. The burden of the complaint raised against Beaconsfield is that Cyprus was annexed without previous consultation with the English people, and fresh responsibilities have been assumed in Asiatic Turkey for which there was no authority. Gladstone disclaims acting the part of the leader of his party, yet he appears to show no backwardness in chalking out a course of proceeding for it. The resolution of Lord Hartington, which protests against the result of the Berlin Congress so far as England is concerned, is to come up for debate in the Commons on Monday next, when we shall without doubt enjoy reading some pretty positive thinking.

The *London Times* has come out pell-mell against Gladstone, and says him, if he disavows leading his party, what he has anything to say for. It warns him and his party against proceeding too far with this experiment of hostility, saying that, if rashly encountered, the Government might be tempted to take advantage of that popular favor (shown to the decrees of the Berlin Congress), and, by a dissolution of Parliament, increase the strength of the majority. It is believed that that is just what Gladstone would prefer. He seems to think, as the *Times* does, that a new election on this Berlin issue would return more Liberals than Conservatives. The former, at any rate, are getting up their resolution and spirits as fast as they can. A hard fight is to be looked for. It is a pity that Beaconsfield himself has no place on the floor of the Commons, where he could meet his enemies face to face. The temper of all England on this matter is likely to be soon made public.

The gratuities for fat cattle which it has been decided to offer at Worcester will be gratefully noted by all those whose interests run in this direction. It will be a feature of the Fair that will deservedly attract a wide competition.

AT WORCESTER.

All looks bright and promising in the direction of Worcester. The people of that wide-awake and wealthy city are thoroughly alive to the importance of the Great Fair of Agriculture which is to be held there in September, and are leaving nothing untried that will forward the general design. They mean, so far as it rests with them, to see that the plans of the managers of the coming Fair lack for no active support of a local character. The cheerful and courageous cooperations of the citizens, from the Mayor all the way through, it is impossible to refer to with more admiration and gratitude than they deserve. When the people of a whole community determine that such an enterprise in their locality shall succeed, it would be a very difficult matter to show that the result can be other than according to their decree.

And now upon the equally prompt and enthusiastic cooperation of the farmers of New England depends the full certainty of the triumph for Agriculture this year to which it is richly entitled and which it can easily achieve. New England ought to put herself in the attitude of a rival of Old England in its agricultural development, every year, until time shall succeed in demonstrating that upon our soil may be raised crops of the staples that shall vie with any product per acre in the world, the finest beef and mutton and pork may be produced, the largest distribution of comfort in domestic living may be secured, and the surest foundation of the common prosperity and happiness be established. An unbroken succession of triumphant agricultural fairs for New England will furnish the required proof yearly that an advance is steadily making and our agricultural resources are being rapidly developed. It is the idea in the head of each individual that makes the great difference for him whether he can accomplish much or little.

As a man respects and honors his own calling, so do others respect and honor him in it. If the farmers of all New England resolve to place their vocation at the front at Worcester, it will be placed at the front by everybody else.

THE OLD STORY.

The startling defalcation which has just been brought to light in this city is only a melancholy repetition of a story which has long become old. The surprise, however, is in this instance greater because the person guilty of it is a man seventy years old, connected as few men in the community have the fortune to be, and reputed to have been possessed of a fortune of half a million dollars at the time when his wrong doings began. Mr. Tappan could not but know where the first step he had taken was sure to lead him. His age and experience in life left him absolutely no excuse for the course he deliberately chose to pursue. An old age which ought to have been enjoyed with the reflections incident to a life well spent, was present to warn and to repress him.

The obvious influence which such a downfall will have on younger men it is almost frightful to contemplate. When a person placed as he was falls, the ruin is necessarily wide spread. He had held his place for thirty-two years; he came of one of our oldest and best families; he had a large domestic circle planted all around him; his name was an honored one in the community; there was no conceivable necessity for the surreptitious employment of money that belonged to others; and, more than all, the ordinary temptations of life were supposed to have lost their edge for him, both by reason of his ripened years and the ample fortune he had already secured. It is one of the most unaccountable cases of the current times, and will have to be set down among things which we all agree to call inexplicable.

The most liberal preparations have been made for the accommodation of the immense throng of people that are expected at Worcester in attendance on the Fair. Not only are the hotels all doing their utmost to provide suitable conveniences, but other arrangements are on foot for the accommodation of from fifty to seventy-five thousand people during the week of the exhibiton. It is going to be the biggest gathering of people ever witnessed at an Agricultural Fair in New England.

WAGES IN GERMANY AND GREAT BRITAIN.

For agricultural labor the pay varies greatly, according to the proximity to or remoteness from manufacturing centres, and ranges from 56 cents a day in the neighborhood of Barmen to 31 cents a day in the lower Rhine Valley, and as low as 18 cents in parts of Silesia. At Barmen, Crefeild and Dusseldorf, carpenters, coppersmiths, plumbers, machinists and wagonsmiths earn 51 to 75 cents daily; saddlers and shoemakers 47 to 52 cents daily; bakers and brewers, with board and lodging, from $1.42 to $2.14 weekly, and without board, from 60 cents a day to $4.28 a week; farm hands are paid from $107 to $215 yearly, with maintenance; railroad laborers from 56 to 83 cents per day, and as high as 95 cents daily for piece work on tunnels; silk weavers can earn $2.15 to $2.85 a week per loom; factory women $2.15, and children $1 a week. Business and wages are very low. In good times, wages are 80 per cent higher. The cost of the necessaries of life has increased some 50 per cent in 13 years, although it is now but little higher than five years ago. The United States consul at Birmingham reports that the better class of mechanics receive about 7 cents an hour, or about $4.28 a week, an increase of 14 per cent over the rates paid five years ago. The increase in the cost of living has been small. The consul at Londonderry reports that Irish farm laborers are getting about six dollars a month, with board and lodging. Lotters get 8 or 9 shillings a week, and day laborers from one to two shillings a day. A teamster may receive 15 shillings a week; and a factory girl, if steadily employed, as high as 7 shillings a week.

Some of the daily journals are urgently telling the farmers that they need a vacation every year as much as other workers do. They are quite right in their views; and no better time offers for such a vacation than the week of the Fair. We advise them to improve it.

☞ England imports upwards of $5,000,000 worth of potatoes annually.

READ AND RUN.

—Peabody, Swampscott and Lynn are about to establish a Truant School.

—A large and venomous rattlesnake is reported to be running loose at Sherborn Framingham, and a reward is offered for him dead or alive.

—Secretary Thompson and party have been paying a visit to the Boston Navy Yard, coming on the Tallapoosa.

—The origin of the fire of last week in the Concord State Prison still remains unknown.

—The Mechanics Fair building was practically finished last Saturday, and the builders took the bonus of five hundred dollars.

—The crocodile, that has been living in the City Fire Alarm office for three years, died the other day of indigestion.

—Considering the intensity and continuance of the heat, fewer deaths occurred in Boston during the torrid term than was apprehended.

—Philadelphia claims, too, to have become the depot for an immense grain export.

—Wig making has greatly fallen off as a business in the last fifteen years.

—Miss Neilson, the actress, has the heart disease.

—The Secretary of the Treasury is making earnest efforts to get silver dollars into circulation.

—The death of Judge Shepley, at Portland, was a surprise and shock to the entire community. His sickness lasted but three days. It will be very difficult to repair so heavy a loss.

—The intensely hot weather has been succeeded by a term of coolness which is strikingly suggestive of autumn.

—The sales of stocks in this market continue large for the season. They are stocking up New York.

—This time the defalcation occurs in Boston. Mr. John G. Tappan, a gentleman seventy years old, and for thirty-two years Treasurer of the Boston Belting Company, proves to be a defaulter to the amount of eight hundred thousand dollars.

—A man has laid a wager that he can walk from Salisbury Beach to Boston and back in one day, without stopping to rest or eat.

—Steamer excursions from the city out into Massachusetts Bay and beyond are extremely popular this season.

—The tramps are beginning to board the trains in New England. A visitation of this kind was recently made on a train in Connecticut, the conductor and brakemen becoming helpless.

—The lightning left a number of memorials of its visit hereabouts on Sunday last.

—The Opposition in England is just waking up to contest the doings of Beaconsfield at the Berlin Congress.

—The destruction by fire of the oldest building occupied by St. Paul's School, near Concord, will not greatly incommode the management. A new and more extended structure will immediately take the place of the old one.

—It is satisfactorily ascertained that sunstroke is more fatal among those who are addicted to alcoholic drinks.

—The lowest tax rate in the State obtains at Nahant, where only five dollars and twenty cents on a thousand are imposed on taxpayers.

—A gang of horse-thieves appear to be plying their vocation from Attleboro to Taunton.

—Springfield thinks of trying the Holly system of piping steam through the streets for heat and power.

—From Lancaster to Worcester, large trees were blown down by the storm on Sunday afternoon last.

—Taxes in Fall River have advanced to seventeen dollars and a half per thousand.

—The husbands of the two women who were killed by lightning at Gloucester, on Sunday, are both absent on fishing voyages, and have yet to learn the sad tidings.

—A colored juryman, recently drawn in Hartford, is said to be the first one of his class to serve on the jury in Connecticut.

—The National Agricultural Congress will hold its next semi-annual meeting at New Haven, on the 27th of August.

—The Nez Perces Indians are being transported to Indian Territory.

—A balloonist in Illinois has been killed by falling a distance of two hundred feet from his balloon.

—There is little question that the Mexicans aid the raiders into Texas in every possible way.

—Sir Garnet Wolseley becomes Governor of Cyprus.

—They have been having storms and earthquakes at St. Thomas, in the West Indies.

—Only two members of the President's Cabinet remain at present in Washington.

—The mint at New Orleans is to be put in operation at once.

—The Emperor William has recovered of his wounds, though he is still very feeble.

—The strike in France is spreading among the silk and lace factories.

—The National Liberals confidently expect to secure a majority in the next German Parliament.

—Boating is still taking place in the Thames, in England.

—Lord Beaconfield has already had the Order of the Garter conferred on him by the Queen.

—The soldiers' and sailors' reunion at Newark, Ohio, was attended by some twenty thousand persons, the President being present.

—The Troy collar girls get paid for their work at the rate of about two cents an hour, and they work sixty-six hours a week.

—California is counting on an additional twenty-five millions, or so, from her increased sales of wheat the coming year.

—The notorious Lord Ogilvy, who has figured of late in New York and Boston, proves to be wholly and thoroughly bogus.

—That floating aspiry on the Mississippi, the idea of which was borrowed from Switzerland, is so far a possible success for its enterprising proprietor.

—Better times cannot be hastened, but unless all the signs are at fault they are surely coming.

—It is said that the facial resemblance between Wendell Phillips and Gladstone is very striking.

—A codfish is said by Prof. Baird to deposit a round mill on of egg. We should not care to be set to count them.

—The dealers style this an "off year" in the peach trade.

—Peter Cooper happens to be a successful man who has tried a great many kinds of business, and has his hands in them now, at the venerable age of eighty seven.

—It is discovered that they had daily papers, or call them bulletins, in ancient Rome, which were read eagerly. They were prepared under the supervision of censors and posted up in conspicuous places.

—Spurgeon is now fifty-four years old, and he has had a trans-Atlantic reputation for nearly twenty years.

—The coming Constitutional Convention in California is expected to be one of the most remarkable bodies ever called together in that State.

—The Liberal party in the British Parliament evidently intends to force a division on the Berlin Congress decrees.

—An excited "National" Convention has been held in New York this week.

—Internal improvements are making in the Boston Post Office, under the supervision of the Government architect.

—A German instructor at Harvard has been dropped on account of collusion with the students to assist them fraudulently to pass their examinations.

—The Circuit Court bar held a meeting in this city on Tuesday, to take action in regard to the death of Judge Shepley.

—There was a great auction sale of blankets, carriage robes, lap robes and horse blankets in New York on Tuesday last, amounting to about a million and a quarter of dollars.

—The sensation in the business community is the failure of the Boston Belting Company.

—There is a wide spread movement to bring down the price of leger beer to three cents a glass, from five cents.

—The Indians are fleeing and throwing away arms, provisions and ponies.

—Trouble won a race at Saratoga. He has won a good many. But this Trouble was a horse.

—The peach crop is going to be a short one.

—Austria is anticipating a good deal of trouble in Bosnia and Hesegovina.

—The yellow fever has subsided in Brooklyn, but made its appearance in New Orleans.

—It is said that not a single case of sunstroke has occurred in Vermont this season.

—Nearly one thousand live sheep were shipped on the ocean steamer Bohemian, from this port to Liverpool, on Tuesday.

—The artists are busy at this season.

Within the limits of the Premium List somewhere is to be found the particular prize for which every farmer in New England has good grounds to compete. It makes a prize worth so much the more when there are a large number of competitors for it.

☞ St. Albans butter market Tuesday—Market quiet; receipts light; prices unchanged; butter, 10c to 16c per pound; bulk of sales at 15c; selections, 16c to 17c per pound.

☞ There has never been found a person who tried Dobbins' Electric Soap, (made by Cragin & Co., 144 State State St., Boston,) that did not say at once, it was the best soap she ever used. Try it once, you'll always use it.

GREAT DEFALCATION IN BOSTON.

Three-Quarters of a Million Involved.

FAILURE OF THE BOSTON BELTING COMPANY—THE EX-TREASURER, JOHN G. TAPPAN, MAKES OVER HIS PROPERTY TO MEET THE CLAIMS OF CREDITORS—THE LOSSES CAUSED BY HIS OUTSIDE SPECULATIONS—THE AMOUNT OF PAPER HELD BY THE BANKS—INTERVIEWS WITH THE DEFAULTER AND OTHERS.

The announcement, Monday afternoon, July 22, of the suspension of the Boston Belting Company, 169 Devonshire street, and the defalcation of its late treasurer, John G. Tappan, gave such a shock to the business community as it has not received for many a day. The credit of the company had stood high, its stock selling recently at from $105 to $125 per share, and formerly at $175. Mr. Tappan was a man whose reputation, won during half a century of business experience, stood untarnished. He was not only the treasurer of this company, and the owner of nearly half its stock, but was the head of the Boston branch of the commercial agency of McKillop, Sprague & Co., and one of its heaviest backers, and held a large interest in the Merriam Packing Company of Texas.

THE DISCOVERY OF THE DEFICIT.

Accounts differ as to the cause of Mr. Tappan's resignation of his treasurership, which took place July 10. It was said at the time that he resigned on account of failing health. He was nearly seventy years of age, and had not fully recovered from a horse-car accident a year ago. But it is also reported that he was invited to resign, that an investigation might be made into the affairs of the company, which, it was understood, were in an embarrassed condition. Mr. E. S. Converse was made treasurer, with the understanding that the position was only to be retained by him until a thorough investigation could be made of the company's affairs. He called together the heaviest creditors yesterday afternoon. There were present the presidents of the several Boston banks who hold the company's paper, John H Cheever, treasurer of the New York Belting & Packing Company, which is involved equally with the Boston company, the latter holding about $150,000 of the New York company's paper. Mr. H. F. Durant, president of the company, called the meeting to order, and made a statement of the present condition of the company's affairs. He stated that the total liabilities were $839,000, their nominal assets $380,000, and their notes payable amounted to $638, 00. The treasurer, Mr. Tappan, had been engaged in outside speculations, had become embarrassed and had made use of the company's funds, thereby mixing his private affairs with those of the company. By his operations he had involved the company to the amount of $803,924. It had seemed best to call the creditors together, and it was proposed to put the company's affairs into their hands, to take such action as they deemed best. Mr. Durant said he was on a large amount of the company's paper, and he had made no disposition of his property, neither did he intend to. His wife and relatives were also losers by this sudden misfortune, but they would all stand by the company. The creditors, after brief consultation, appointed Messrs. J. P. Melledge, William F. Hunt and Asa A. Alden as a committee to make a thorough investigation of affairs and report at a future meeting.

The property turned over to the company consists of stock in gold and silver mines situated in Colorado, the value of which is uncertain; stock in the Merriam Packing Company of Texas, representing about $215,000; stock in the mercantile agency of McKillop, Sprague & Co. in New York, representing $415,000; also wharf property in East Boston and real estate in Boston and its vicinity; also $200,000 in the Boston Belting Company's stock.

THE OUTSTANDING PAPER.

The following is an approximate amount of the paper on which the names of the Boston Belting Company and J. G. Tappan appear either as promissors or indorsers, which is held in the various banks of this city:

Banks.	Amount.	Banks.	Amount.
Bk of Commerce	$70,000	Atlas	40 000
Revere	20,000	Freeman's	30,000
Old Boston	17,000	State	45,000
Massachusetts	20,000	City	12,000
Eagle	15,000	Republic	15,000
Union	10,000	N. E. Trust Co	10,000
Hamilton	20,000	Commonwealth	15,000
North	30,000	Mechanics	20,000
Suffolk	20,000	Tremont	10,000
Market	30,000	Maverick	25,000

The following are the out-of-town banks holding paper:

Banks.	Amount.
Bunker Hill, Charlestown District	$25,000
Monument, "	10,000
Blue Hill, Dorchester "	10,000
First National, Lynn	25,000
City, "	5,000
Central, "	5,000
Grand, Marblehead	5,000
Naumkeag, Salem	25,000
Shetucket, Norwich, Conn	10,000

About $25,000 is held in various banks in New York city. Boston is generally good. It is estimated that about $300,000 is the amount of the Boston Belting Company's individual promises.

THE ANNUAL RETURN OF THE COMPANY

filed with the Secretary of the Commonwealth, Feb. 19, 1878, is as follows:

ASSETS.

Real Estate	$127,270.49
Machinery	40,000.00
Other assets:	
Cash and debts receivable	672,900. 4
Manufactures, material and stock in process	390,876.99
Miscellaneous	127,508.99
Total	$1,377,556.71

LIABILITIES.

Capital stock	$500,000.00
Debts	692,078. 8
Excess—balance profit and loss	185,578.23
Total	$1,377,656.71

THE STOCKHOLDERS.

Its paid-up capital of half a million was divided into 5000 shares, which were held by the following-named parties:

John G. Tappan	1984
Henry P. Laing	800
John H. Cheever	860
Josiah S. Tappan	305
Lewis N. Tappan, Jr	180
Fred H. Tappan	100
John G. Tap an, trustee	82
James S. Foreyth	75
Isaac Taylor	74
William H. Furber	60
Charles Cullis, trustee	60
Mrs. Harriet Stevens	50
Edward Upham	50
Charles A. Stevens	35
John E. Tappan	32
Bessie W. Tappan	32
Mary S. Tapsan	32
J. W. Kimball	23
J. H. D. Smith	21
E. Daniel Downer	20
Moses L. Stevens	19
Mary S. Sweetland	17
Ira E. Sanborn	15
Harriet L. Stevens	11
George White, trustee	10
Lucy S. Upham	10
George B. and W. R. Maine	10
Joshua Lovett	10
Horace N. Stevens	8
Moses T. Stevens	8
Arthur W. Tufts	5
Arthur Tappan	2
Herbert Tappan	2

Mr. Taylor recently sold fifty shares of his stock—twenty-five at $125, fifteen at $110, and ten at $105, but none of it has yet been transferred upon the books of the company. Mr. Arthur W. Tufts is understood to have been a purchaser of one of the larger lots. Mr Furber for over twenty-three years was Mr. Tappan's private secretary, but when elected mayor of Somerville, two years ago, left his employ; but now goes back to the belting company's employ as Mr. Tappan's successor. Dr. Cullis bought his stock of Mr Durant at $175, with money that he held with which to pay off a part of the Consumptive's Home Indebtedness, as the bank at that time was unwilling to reduce the mortgage, and the investment was recommended and made. Five several Stevens are in the list of one family, who originally had one block of 100 shares. Moses T. Stevens is a leading woollen manufacturer at North Andover. The Tappans are children and nephews of John G. Tappan Mr Upham is a woolen manufacturer at Ware. His wife holds ten shares. Mr. Kimball is John G. Tappan's brother-in-law, and Mrs. Mary S. Kimball, Tappan's sister. Mr. Sanborn and Mr. Cheever are with the New York Belting and Packing Company. George White is a judge of probate. Mr. Downer is the belting company's salesman. Mr. J. H. D. Smith is a lawyer, son of Mr. Smith of the firm of Smith & Lovett; the latter gentleman is also understood to be a stockholder. A. W. Tufts is the belting company's bookkeeper. Henry F. Durant is the well-known founder of Wellesley College, Wellesley. James B. Forsyth is the engineer at the factory. The stock included a held by Mr. Tappan as trustee represents an investment for his father's estate.

MR. TAPPAN AND THE BELTING COMPANY.

Mr. Tappan is a native of Boston, son of John Tappan, and a descendant of one of the most reputable and widely known Boston families. The late Lewis Tappan of Brookline was his uncle, and several members of the family were among the champions of the anti-slavery cause. Mr. Tappan, who is now over seventy years of age, entered Harvard College in his youth, and then engaged in business, inheriting from his father a large property, which he increased by profitable investment. He has a large and estimable family, and his present sad position, in declining years, will bring a pang of sorrow to many of the hearts of those who had only known him hitherto as the honest business man and kind husband and father.

The Boston Belting Company, under the firm name of McBirney & Cheever, was formed over thirty years ago, and was successful from the very start. Shortly after its formation Mr. John G. Tappan was admitted thereto as a partner, the style of the firm being changed to McBirney, Cheever & Tappan. A corporation having been organized out of the old concern, Mr. Tappan was made its treasurer, a position he has since, till his resignation a few days ago, retained.

Mr. Tappan has had the entire charge of the company's business, and as the dividends for the past thirteen consecutive years have been annually over twenty-three per cent., the stockholders have never asked any questions. In fact, the directors, so called, have given no attention to the business of the concern. Mr. Tappan has managed affairs as he pleased, without consulting any one interested. Mr. Tappan's private debts outside of his debts to the company amount to $92,000 unsecured, and between $80,000 and $90,000 secured.

It is supposed that the money which Mr. Tappan raised upon the credit of the company has been used in his private speculation to bridge over emergencies. He was quite a large operator in real estate, not only in this city, Chelsea and other places in the immediate vicinity, but in Colorado and in Texas. The story is simply the old one, so often and so sadly enacted, of entanglement in speculation, attempted extrication by temporary but unauthorized borrowing of company funds, anxious waiting for a favorable turn of Fortune's wheel, and final exposure and ruin. Five years ago Mr. Tappan was actually worth something like a half a million of dollars.

MR. TAPPAN INTERVIEWED.

To persistent inquiries and leading questions Mr. Tappan positively refused to make any statement whatever, beyond the declaration that the serious charges were "wholly false," and that "the truth would appear to-morrow morning," and that he would "be in Boston to-morrow or next day, when he could be seen." Sundry other stockholders residing or stopping temporarily in the town were also seen, and the substance of their statements was this: That Mr. Tappan's troubles were largely due to his connection with the McKillop-Sprague agency; that the Merriam Packing Company, organized two years ago, was upheld by Mr. Tappan because his son was president, but the conviction was felt that this enterprise had not been on the whole a losing one.

OTHER INTERVIEWS.

Mr. William P. Hunt, president of the Atlas Bank, who was appointed on the Committee of Investigation, gives the following facts: The statement made at the meeting of the creditors on Monday was that Mr. Tappan had involved the company to the amount of $815,000. Of this amount $300,000 was money put into the mercantile agency of McKillop, Sprague & Co., $28,000 indorsements of notes of the same company, and $220,000 his own notes. The assets of the company were valued at $240,000, and consisted of real estate, $117,000; machinery, $50,000; merchandise on hand, $300,000; book accounts, $100,000; and the rest in goods consigned. The amount of property assigned by Mr. Tappan to the company was worth nominally over $1,000,000, but its real value was uncertain, and was certainly much less than estimated. The real estate of the company is situated on Tremont street, near Roxbury, and covers ninety thousand feet.

In 1873 the company was financially sound, and had a large surplus, the losses occurring since that time. The stockholders and directors had unlimited confidence in Mr. Tappan, and had always been satisfied with an exhibit of the balance sheets, which made the affairs of the concern appear in a very different condition from what they were really in. Whether this was owing to the carelessness of the directors in examining the balance sheets, or to incorrect statements made therein by Mr. Tappan, he was unable to say. He presumed that the directors were aware that Mr. Tappan was using the name of the company on paper for his own use, but did not suppose he was doing so to a sufficient extent to embarrass the company. He believed that the assets of the company would prove sufficient to pay all indebtedness, and that the business had always been exceedingly profitable, he had no doubt that new capital would easily be raised for continuing it under a new organization. The present failure was wholly owing to the private speculation of Mr. Tappan outside the regular business of the company.

Mr. Henry F. Durant, the founder of Wellesley College, is the president of the company, and next to the late treasurer the largest stockholder. His investment in the corporation was $30,000 at par value, and of course he owns one of the two hundred thousand dollars at the market value of the stock during the past year. Mr. Durant will have the sympathy not only of the business men of Boston, with whom he has been so long associated, but of the wider circle of friends who appreciate his philanthropy and benevolence. Mr. Durant is not an indorser on the paper of the Belting Company for $80,000. When asked if he should protect his indorsement, he replied that all his property belonged to his creditors.

When Mr. Durant was asked whether or not Tappan had committed a criminal act by using the credit of the company for his own purposes, the reply was, "Mr. Tappan, being one of the heaviest stockholders, undoubtedly thought he was using his own money, and at the same time probably thought he was acting in a perfectly legitimate manner." To the reporter here asked if Tappan was liable to be proceeded against in the courts, whereupon Mr. Durant shook his head in the negative, at the same time saying, "He has turned all his property over to the latter for reparation could he make? Beside, he is very old. He and his family have lost everything; and then, again, it is improbable that he is guilty of any criminal act in the eye of the law."

NOTES.

The

Editor's Table.

☞ *Harper's Monthly* for August offers for its contents—The Golden Age of Engraving; The White Sulphur Springs; Aunt Eunice's Idea; S. Ipwreck; An Old-Fashioned Spa; Manuel Menendez; Who Knows? Birds and Plumage; In a Cloud Rift; A Glimpse of Nature from My Veranda; Macleod of Dare; John Compradon; A Summer Day; The Return of the Native; The Cliffs at Newport; Jenny Gridley's Concession; and the Editorial Department. For sale by A. Williams & Co.

☞ *The Atlantic Monthly* for August has—The Europeans, by Henry James; Moonshine, a burletta in one act; by T. B. Aldrich; One Too Many; John Bull, by Richard Grant White; The Stage in Germany; The Meolid of the Prophet; Railfoot Lake; New England Women; The New Republic and other Novels; Poems, by C. P. Cranch, Young, Elizabeth Akers Allen, and Catharine J. Schuller; Growth of Conscience in the Decorative Arts; The Contributor's Club; and Recent Literature. It is a fine midsummer issue. For sale by A. Williams & Co.

☞ *The Popular Science Monthly* for August has—Civilization and Science; Prof. Huxley's Address at the Harvy Tricenuary; The Tyrolese and its Depredations; On the Dread and Dislike of Science; Curious Systems of Notation; A New Photographic Process; Voluntary Motion; Moneta, and the Problem of Life; Composite Portraits; Illustrations of the Logic of Science; Traits of the Intelligence—Hasheesh; Sketch Poisons of the Intelligence—Hasheesh; Sketch of Thomas Alva Edison; and Editor's Table. For sale by A. Williams & Co.

☞ *Blackwood's Magazine* for July contains—John Caldigate, Part IV; Apples, a comedy; Translations from Deine; Gordon Baldwin; Gaelic Lore and Modern Slang; Our Kentish Parish; The Two Muses; The South African Question; The Congress. Published by the Leonard Scott Publishing Co., New York.

☞ *Scribner* for August contains—Portrait of William Cullen Bryant; A Seaport on the Pacific; Sharp Eyes; Our Tavern; Benefit; William Cullen Bryant; Falconberg; Catch; Off Soundings; Glimpses of New England Farm Life; The Physician's Guest; Longstaff's Marriage; Old and Young; To South Africa for Diamonds; Old Robin; Rovy; Midsummer; Meridian; Topics of the Time, and the other departments of the Editor's Table. It is a superb summer number. For sale by A. Williams & Co.

☞ *St. Nicholas* for August has, among its contents—King Cheese; Rods for Fire; Jobs and Jobbers; The Digger, Wasps at Home; Sharp Eyes; Our Tavern; Benefit; Willie's Ride; A Frog's Point of View; The Most Beautiful Thing; and Jack in the Pulpit Lookout Mountain; and Jack in the Pulpit Lookout Mountain; and Jack in the Pulpit For sale by A. Williams & Co.

☞ *Lippincott's Monthly Magazine* for August has as following contents—Fishers of Men; A Prison for Women; The Backwoods Settlements; Chips from a North western Log; Hi; A Tribute; Voltaire in Geneva; Mr. Bellamy; Superfluous Praying; Grasses; Miss Hildah's Scholars; The Royal Mistress of a Royal Race; A Bit of Flotsam; Mother of a Royal Race; A Bit of Flotsam; Anna, the Pauper Miss; Foreseable Jack; Beppo; Anna, the Pauper Miss; Foreseable Jack; Beppo; Anna, the Pauper Miss; Foreseable Jack; Beppo

The Poet's Corner.

Written expressly for the Massachusetts Ploughman.

ANGELS GUARD US.

What a glimpse is given to us,
Of the tollsome, weary journey
Of the pilgrims, pressing on
To the beacon lights of Heaven;
Many are the wayside comforts,
If we raise our hand to grasp them;
Many are the joys, if sought for,
We shall find most freely given.

Like the golden beams of sunlight,
Brightening up the dreary shadow,
Like the silver rays of moonlight,
Gleaming from the blue above,—
Thus the holy, blessed angels
Follow close beside us ever,
Guarding with a watchful eye,
Binding with the chains of love.

Let us then tread boldly onward,
Through this guarded, beaten pathway,
It may lead us, if we are watching,
Far up on the mountain high;
We may weary as we journey,
But let courage never falter;
If it leads down in the valley,
Angels will be ever nigh.

L. W. M.

New Ipswich, N. H.

Ladies' Department.

MANUEL MENENDEZ.

FROM THE ITALIAN OF DE AMICIS.

I.

The Andalusian ballad "Don Manuel Menendez" has slight foundation in fact. The truth is only to be learned from the few inhabitants of Seville who knew him personally, as he left Seville on the death of his parents, at fourteen years of age, making only a brief return, ten years after, before quitting the city forever. But even in these few months the city rang with his name. Even then he made no steady stay, departing, returning, disappearing, without hinting wherefore or whither; and not infrequently the first hint of his un-hoped for reappearance came in the shape of some new story of quarrel and duel, of sword thrusts given or taken outside the Cordorva Gate. Not a few of those who knew him thought him a trifle mad, the consequence, they maintained, of an awkward knock on the head from the horns of a young and savage bull (*novillo*) in the Sunday games of the arena. The mishap was real enough, and he carried the marks still, but his brain was as sound as ever. His wonderful and exuberant vitality overflowed in motion, love-making, poetry, tears, bloodshed, but found quietus in none. To his warm heart he added the pride of Lucifer, set off by storms of rage, in which he would often dash his bare hand against the wall in sheer fury. With almost appalling firmness and determination he combined a madman's courage, and a woman's jesting word gave his character at once: "If there are inhabitants in the comets, I can't help fancying they must be like Manuel Menendez." His words were not uttered—they exploded; and his vitality ran to waste in the very vibrations of his voice. When in the arena of Seville, a bull-fighter, losing courage, planted a treacherous thrust in his brute adversary, or tormented him when he should have killed him, the most terrible shout of "Cowards!" which echoed through the inclosure was always from his lips; and at the theatre San Fernando, when the silence of the parterre was suddenly broken by one of those heart-felt, heart-stirring "*Bravi!*" which send a tingle through the veins of every one present, no one asked from whom it came; it was still Menendez. His friends were wont to speak of his *colonada* in *Salen Caracoles* of Andalusian bombast. His lyrics were but one prolonged period, a flood of sounding phrases and glittering imagery, winding up with some abrupt turn, the basis of the whole poetic superstructure, meant to be striking and effective, but too often unintelligible.

No less puzzling than his poetry was the life of this man. He might be seen hatless crossing the Alameda at midnight, or issuing at daybreak from the cathedral wicket, or wandering restlessly, a whole morning through, up and down the long *Strada delle Cento Swallate* (street of the hundred turns) with head bent forward as if hunting for pins on the pavement. From his house the nocturnal wayfarer could hear the sound of reading aloud, of frantic laughter, the crash of window panes, the sounds of woman's sobbing. The most extravagant charges, save always the one charge of cowardice, were laid to his account—and believed.

Of course all Seville knew him well. The upper classes, little given to gossip, still regarded him with disfavor born of distrust and timidity; the lower revered him for having carved an old poor man in a wood of the Guadalquiver. Probably there was not a woman in the town, from the Governor's wife to the poorest work-girl in the cigar factory, who had not at some time or other, under pretext of shading her face, shot through the sticks of her screening fan a glance of inquiry or of invitation at this incorrigible scape-grace. For Menendez's fine Arab features were off by a mane of raven hair, and his dress, tasteful in its eccentricity, set off like a *maillot* the powerful but aristocratic lines of his youthful figure.

Such was Manuel Menendez—as far as possible from the savage the popular ballad would make him out. Such at least, we find him after seven month's stay in Seville, when he returned to his native city